

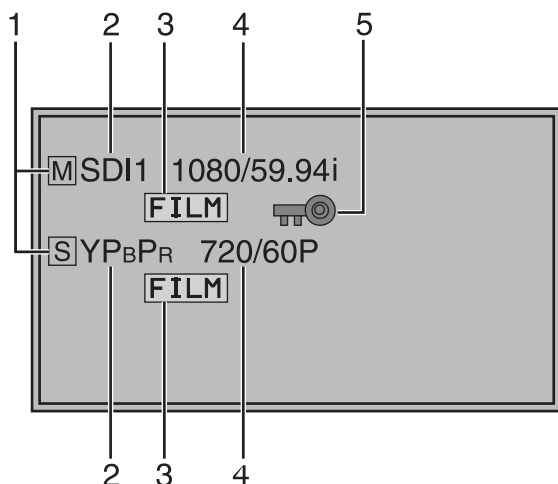
Panasonic Broadcast

BT-LH2550 Menu Information

How to Use the On Screen Menu

The screen displays eight types of information: input signal status, picture/volume adjusting menu status, sharpness display, FUNCTION display, audio level meter display, menu display, TIME CODE display and CLOSED CAPTION display.

Input signal status



1. Main window **[M]**, sub-window **[S]** indication

- Indicates whether the main window or sub-window is displayed.
- In split screen display, the screen synchronized to the reference sync changes with the input signal format and "TWO WINDOW SIZE" settings (→ page 44).
The screen synchronized to the reference sync is displayed in white and the screen that is not synchronized is displayed in yellow.

2. The selected input line (→ page 11, **7**)

- VIDEO, SDI1, SDI2, YPbPr/RGB-VIDEO/RGB-COMP. DVI-VIDEO/DVI-COMP.
- Use "STATUS DISPLAY" in the "SYSTEM CONFIG" menu to set the display status (→ page 29).

3. Various indications (**FILM** mode)

- This indicates that "GAMMA SELECT" is set to "FILM" in the "VIDEO CONFIG" menu.

4. Signal format

- Use "STATUS DISPLAY" in the "SYSTEM CONFIG" menu to set the display status (→ page 29).
- "UNSUPPORT SIGNAL" appears if an unsupported signal is input. It may also indicate that the format selected in the "INPUT SELECT" menu does not match the input signal.
- "NO SIGNAL" appears if no signal is input.

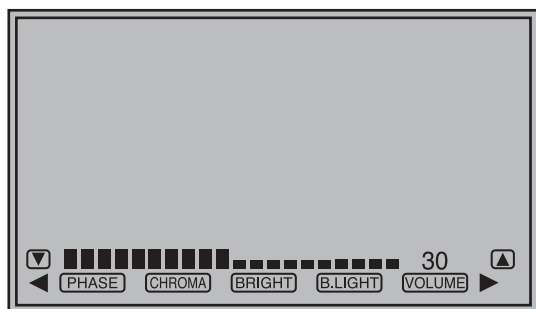
Note:

"UNSUPPORT SIGNAL" and "NO SIGNAL" may not be properly displayed.

5. Various indications (**Lock status**)

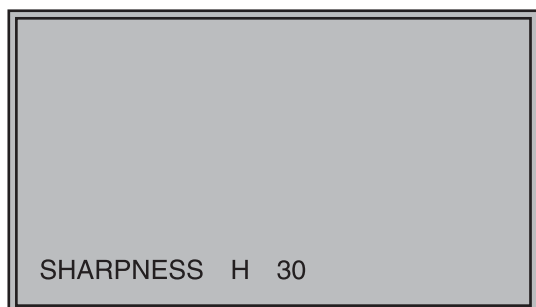
- This indicates that "CONTROL" is set to "REMOTE" in the "CONTROL" menu.

Picture/volume adjusting menu



- Press the ADJUST button (→ page 11, **9**) to open the picture/volume adjusting menu.
- To clear the display, press the ADJUST button again, press the MENU button or leave it idle for 10 seconds.
- Only adjustments that appear on the screen can be adjusted.
- The display always appears in the same screen location.

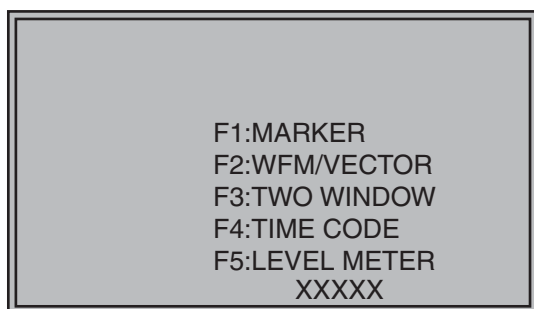
Sharpness display



- This is the SHARPNESS H/V mode display.
- It disappears after 2 minutes of inaction.

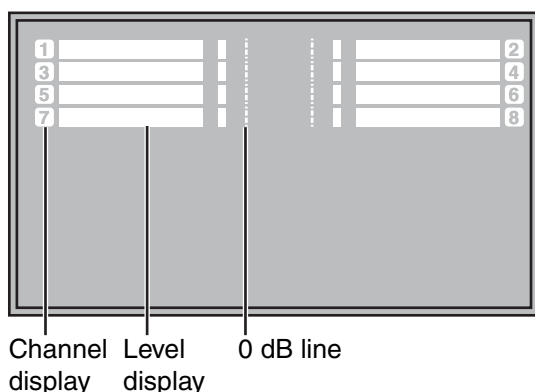
How to Use the On Screen Menu (continued)

FUNCTION display



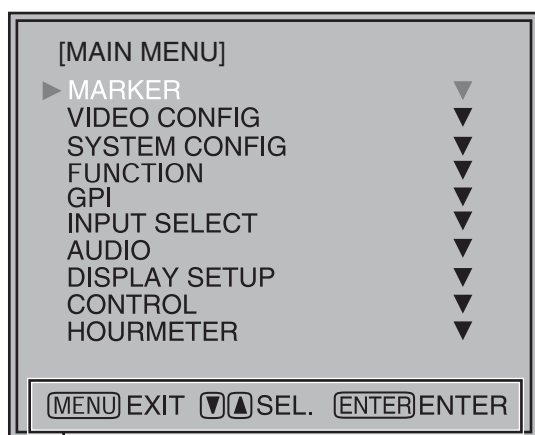
- Use the menu to open and set up functions.
- When "FUNCTION DISPLAY" (→ page 32) is set to ON, press any of the "FUNCTION1" to "FUNCTION5" buttons to display the functions assigned to FUNCTION buttons.
- This display disappears after 2 seconds of inaction.
- "XXXXX" indicates operating status (→ page 34, "Functions displayed during FUNCTION button operation").

Audio level meter display



- A white skeleton bar meter indicates the audio level for SDI signals.
- You can switch the level display on/off and set the number of displayed channels using the menu (→ page 38, "AUDIO").
- The 0 dB line and channel display can be switched on/off from the menu (→ page 38, "AUDIO").

Menu display

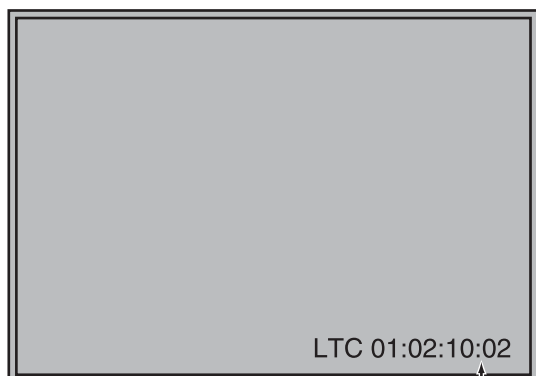


Displays instructions on menu button operations.

- This is the menu display.
- It disappears after 2 minutes of inaction.
- You can change position of the display (→ page 29, "MENU POSITION").

How to Use the On Screen Menu (continued)

TIME CODE display (TC)



(:) NDF
(.) DF

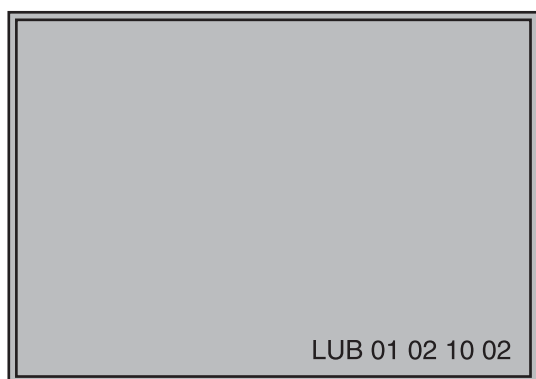
- Use the menu to display and set the time code for HD-SDI signal input. It also allows you to switch display mode (VITC, LTC, VUB, LUB).

In VITC and LTC display mode:

- Displays the time code in hours: minutes: seconds: or frames.
- In drop-frame mode, a different delimiter between seconds and frames is used.

Note:

Read errors are displayed as "--:--:--:--"



In VUB and LUB display modes:

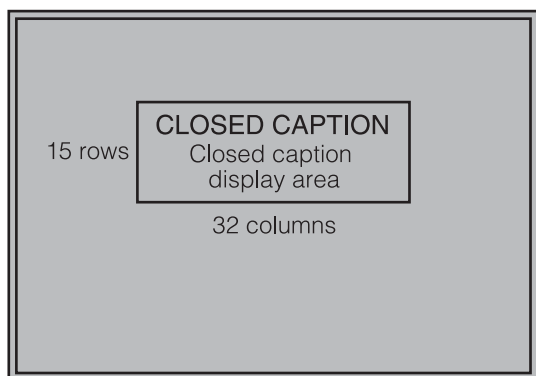
- BG8, BG7, BG6, BG5, BG4, BG3, BG2, BG1 appear in the stated order. BG: binary group
- The (:) delimiter does not appear.

Note:

Read errors are displayed as "--:--:--:--"

- Display position and character size can be modified (→ page 39, "POSITION" and "FONT SIZE" in the "DISPLAY SETUP" menu).

CLOSED CAPTION (CC) display



- Use the menu to display and set closed caption display for VIDEO (NTSC) signals. It also allows you to select display mode (CC1 to CC4) (→ page 39, "CLOSED CAPTION" and "MODE SELECT" in the "DISPLAY SETUP" menu.).

Note:

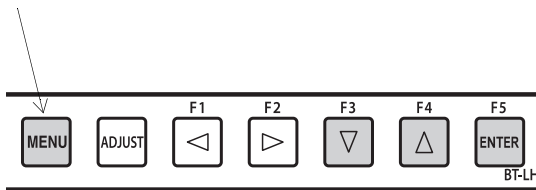
Closed captions are not available during HV DELAY.

In split-screen display, closed captions appear only when a VIDEO input line is displayed in the main window.

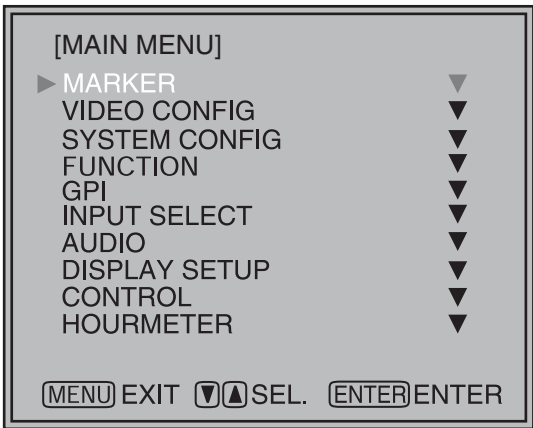
How to Use the On Screen Menu (continued)

Menu operations

1. Press [MENU] to display the MAIN menu.

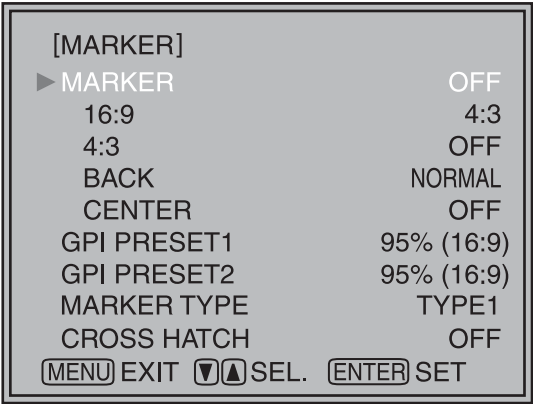


2. Press [▼, ▲] to select a menu and push [ENTER].



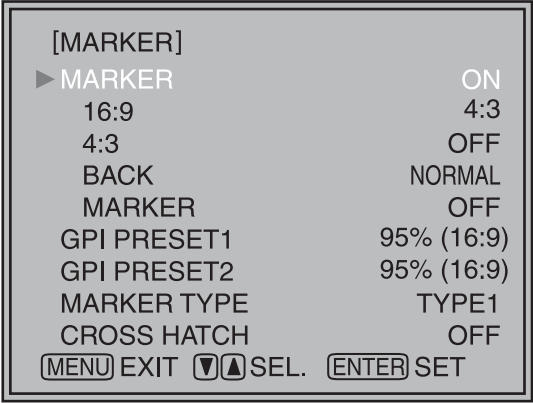
3. Press [▼, ▲] to select a sub menu and press [ENTER].

The settings in the sub menu change to green.



4. Press [▼, ▲] to select a setting, then press [ENTER].

To cancel, press [MENU].



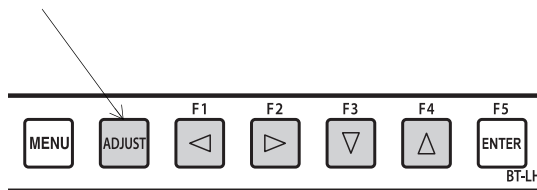
To return to the previous screen

Press the [MENU] button.

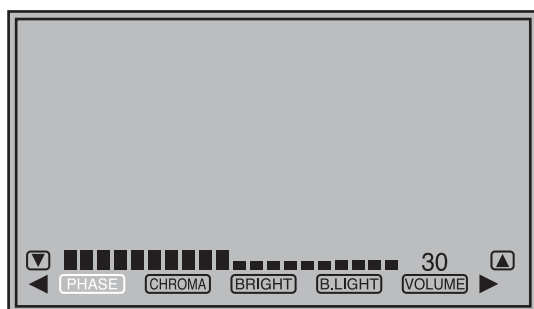
How to Use the On Screen Menu (continued)

Picture/volume adjusting menu operations

1. Press [ADJUST] to display the picture/volume adjusting menu.



2. Press [◀, ▶] to select item to adjust.
The selected item changes to white.



3. Press [▲, ▼] to adjust.

PHASE	0-60 (30)
CHROMA	0, 10-60 (30)
BRIGHT	0-60 (30)
B.LIGHT [BACKLIGHT]	0-60 (50)
VOLUME	0-60 (0)

() : Factory defaults

- Setting [B.LIGHT/CONT.] to CONT. [CONTRAST] in the [SYSTEM CONFIG] menu changes the B.LIGHT indication to CONT. enabling CONTRAST adjustment.
CONT. [CONTRAST] 0-60 (50)

- Adjustments are not possible under the following conditions.
- When "CONTROL" in the "CONTROL" menu is set to "REMOTE," the key mark appears and adjustments cannot be changed.
- Setting the MONO function to ON (→ page 27) disables the [PHASE] and [CHROMA] operations.
- During [RGB-COMP] and [DVI-COMP] input, the [PHASE] and [CHROMA] operations are disabled.
- During HV DELAY (→ page 33) operation (and a setting other than OFF is selected), [BRIGHT] operation is disabled.

4. Press [ADJUST] to end adjustments. The display is automatically closed after 10 seconds of inaction.

- The unit loads set values when the power is turned on. Changed values are automatically saved after 10 seconds.

User Data

You can save and load up to five combinations of menu settings and picture/volume adjustments as user data. You can also return settings and adjustments to their factory defaults.

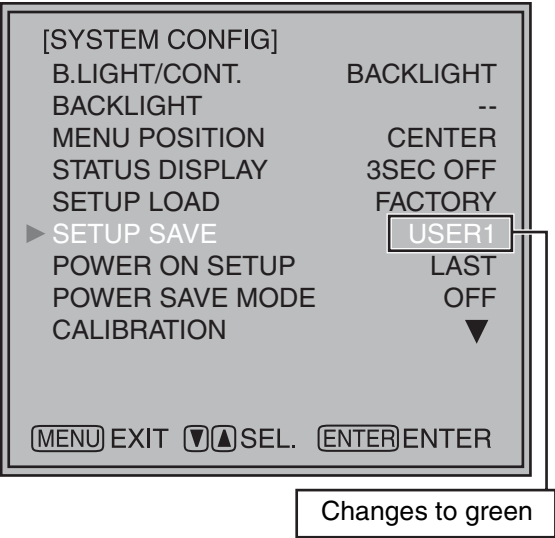
User data include the following settings.

- Menu settings except “SETUP LOAD/SAVE” and “CONTROL/CONTROL” (including button function settings on the monitor front panel)
- Screen adjustments made in the picture/volume adjustments menu

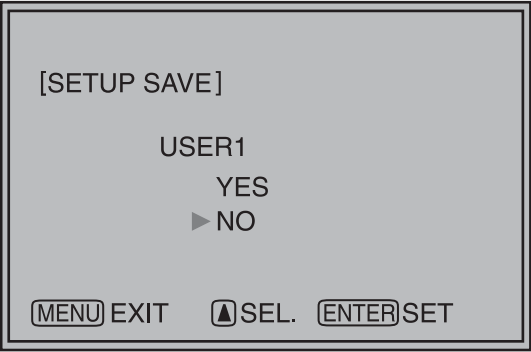
Saving user data

1. Press [MENU] to display the MAIN menu.
2. Press [▼, ▲] to select the “SYSTEM CONFIG” menu and press [ENTER].
3. Press [▼, ▲] to select the “SETUP SAVE” sub menu and press [ENTER].

The setting in the sub menu changes to green.



4. Press [▼, ▲] to select a “USER1” to “USER5” file to save the settings to and press [ENTER].
- The following screen appears.



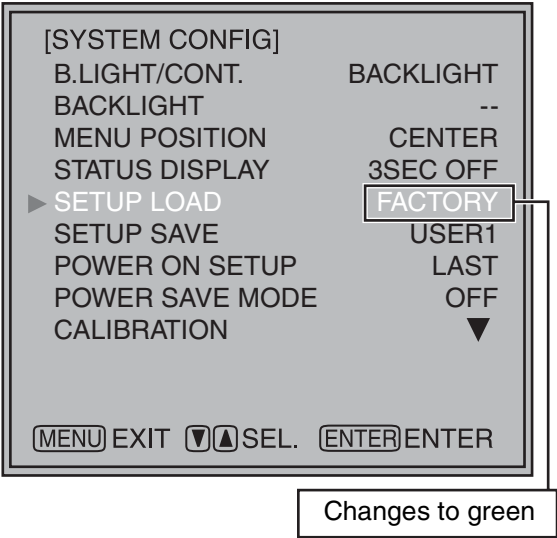
5. Select “YES” and press [ENTER].
- This saves the user data.

To return to the previous screen
Push [MENU].

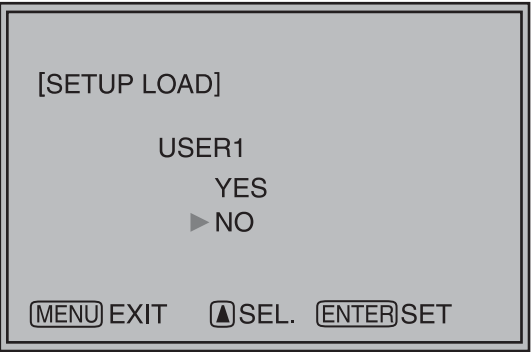
Loading user data

1. Press [MENU] to display the MAIN menu.
2. Press [▼, ▲] to select the “SYSTEM CONFIG” menu and press [ENTER].
3. Press [▼, ▲] to select the “SETUP LOAD” sub menu and press [ENTER].

The setting in the sub menu changes to green.



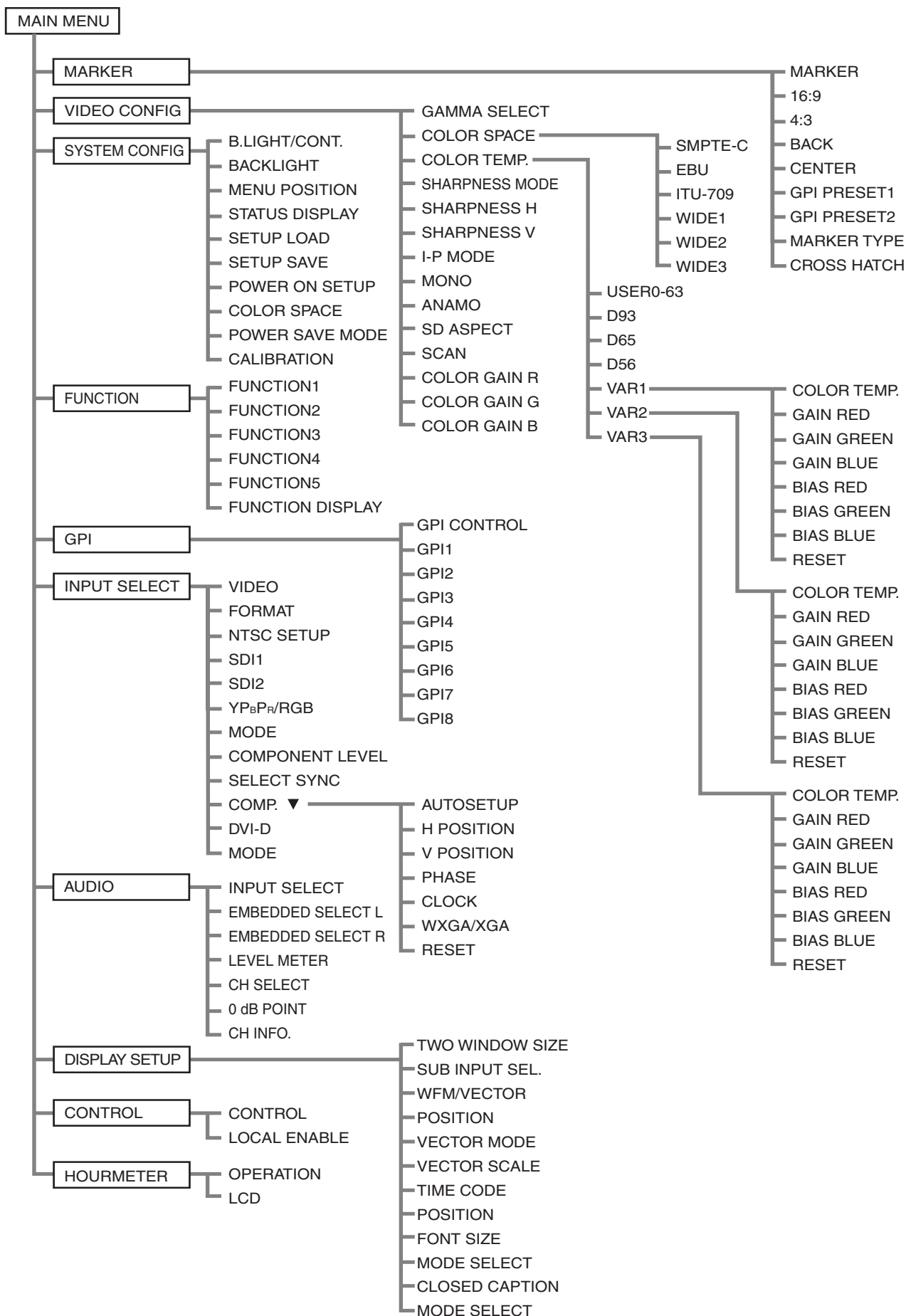
4. Press [▼, ▲] to select a “USER1” to “USER5” file to load and press [ENTER].
- The following screen appears.
To return to the factory defaults, select “FACTORY.”



5. Select “YES” and press [ENTER].
- This loads the user data.

Main Menu

Menu configuration



Main Menu (continued)

MARKER

This function is not available in split screen display of the TWO WINDOW function. (CROSS HATCH is not affected.)

Underlined values indicate factory defaults.

Sub menu	Setting	Description
MARKER	<u>OFF</u> ^{*1} ON	Turns the MARKER setting on and off.
16:9 ^{*2*3*4}	OFF <u>4:3</u> 13:9 14:9 CNSCO VISTA 95% 93% 90% 88% 80% USER 85%	Selects/displays the 16:9 marker type. <OFF> No marker display <4:3> 4:3 marker <13:9> 13:9 marker <CNSCO> CNSCO marker <95%> 95% area marker <80%> 80% area marker <93%> 93.1% area marker (TYPE1) 93% area marker (TYPE2) <88%> 89.5% area marker (TYPE1) 88% area marker (TYPE2) <USER> This area marker can be varied in 1% increments in the range between 80% to 95%. However, an 88% value for a TYPE1 MARKER TYPE indicates an area marker whose height is 89% of available screen height in the selected aspect ratio. (The factory default is 85%.)
4:3 ^{*2*4}	<u>OFF</u> 95% 93% 90% 88% 80% USER 85%	Selects/displays the 4:3 marker type. <OFF> No marker display <95%> 95% area marker <93%> 93% area marker <90%> 90% area marker <88%> 89% area marker (TYPE1) 88% area marker (TYPE2) <USER> This area marker can be varied in 1% increments in the range between 80% to 95%. Values of 93% and 88% for TYPE1 MARKER TYPE indicate area markers whose height is 93.1% and 89.5%, respectively, of available screen height in the selected aspect ratio. (The factory default is 85%.)
BACK ^{*2}	<u>NORMAL</u> HALF BLACK	Selects the background brightness around the marker. <NORMAL> Normal background <HALF> 50% background brightness <BLACK> 0% background brightness (black)
CENTER ^{*2}	<u>OFF</u> ON	Displays/turns off the center marker. <OFF> Turns the display off <ON> Turns the display on

*1 This setting is turned "ON" when receiving marker control in REMOTE operation. (GPI, if set, has priority.)

*2 These settings are disabled when the GPI function (→ page 48) is used to control the marker setting. They are also disabled in split screen mode.

*3 This setting is enabled only for HD and SD signal input in 16:9 aspect ratio mode.

*4 TYPE1 and TYPE2 area marker size depends on the "MARKER TYPE" setting (→ page 23).

Main Menu (continued)

Sub menu	Setting	Description
GPI PRESET1 ^{*5}	4:3 13:9 14:9 CNSCO VISTA	GPI PRESET1: Selects the marker displayed by the GPI terminal "MARKER1 ON/OFF" (→ page 48) operation. GPI PRESET2: Selects the marker displayed by the GPI terminal "MARKER2 ON/OFF" (→ page 48) operation.
GPI PRESET2 ^{*5}	95% (16:9) 93% (16:9) 90% (16:9) 88% (16:9) 80% (16:9) USER (16:9) 95% (4:3) 93% (4:3) 90% (4:3) 88% (4:3) 80% (4:3) USER (4:3)	<4:3> 4:3 marker <13:9> 13:9 marker <14:9> 14:9 marker <CNSCO> CNSCO marker <VISTA> VISTA marker <95% (16:9)> 95% area marker for 16:9 aspect ratio <93% (16:9)> 93% area marker for 16:9 aspect ratio <90% (16:9)> 90% area marker for 16:9 aspect ratio <88% (16:9)> 88% area marker for 16:9 aspect ratio <80% (16:9)> 80% area marker for 16:9 aspect ratio <95% (4:3)> 95% area marker for 4:3 aspect ratio <93% (4:3)> 93% area marker for 4:3 aspect ratio <90% (4:3)> 90% area marker for 4:3 aspect ratio <88% (4:3)> 88% area marker for 4:3 aspect ratio <80% (4:3)> 80% area marker for 4:3 aspect ratio <USER> This area marker can be varied in 1% increments in the range between 80% to 95%. The above indicates values when the 16:9 and 4:3 sub menus are selected.
MARKER TYPE ^{*4*6}	TYPE2 TYPE1	Selects conventional monitor or camera recorder marker size. <TYPE2> Marker size compliant with the camera recorder (Panasonic) <TYPE1> The marker has the same size as that of the previous model (BT-LH2600W).
CROSS HATCH	OFF LOW HIGH	Turns the cross hatch grid on and off and sets its density. <OFF> Turns the display off <LOW> 20/256 gradations (displays a light cross hatch grid) <HIGH> 70/256 gradations (displays a dense cross hatch grid)

^{*5} Remote control via RS-232C ends in error (error response: ER001) when "GPI PRESET1" or "GPI PRESET2" is selected with the GPI function.

^{*6} Display size for SD signals differ.


TYPE1: The effective horizontal area meets the SMPTE125M for NTSC and ITU-R BT 601-5 for PAL.

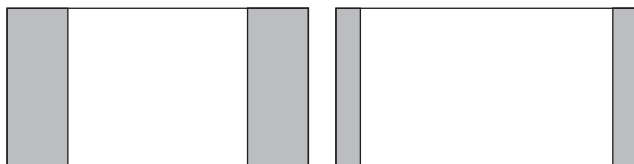
TYPE2: The effective horizontal area meets the EIA-RS170 for NTSC and ITU-R BT 470-4 for PAL.

Marker types

16:9 marker

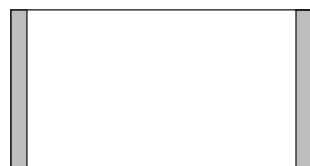
(Displayed for HD input and SD input in 16:9 ratio mode.)

This marker is only displayed as a vertical bar. The  section becomes the "MARKER BACK".



4:3 marker

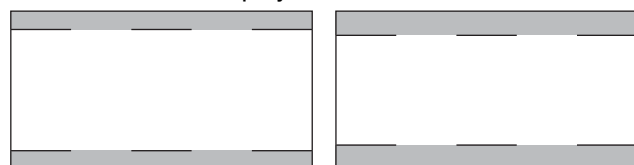
13:9 marker



14:9 marker

VISTA marker, CNSCO marker

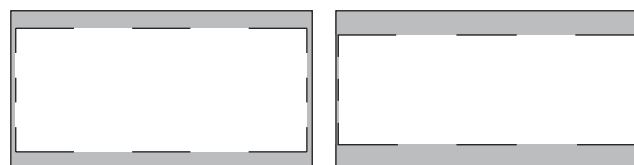
This marker is displayed as a horizontal dotted line.



VISTA marker

CNSCO marker

The marker is displayed as a vertical dotted line when "UNDER" is selected under "SCAN" in the "VIDEO CONFIG" menu.

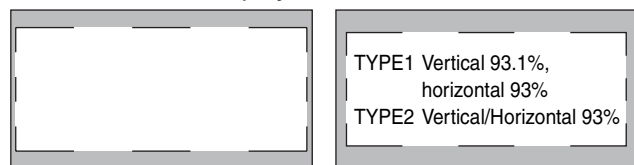


VISTA marker

CNSCO marker

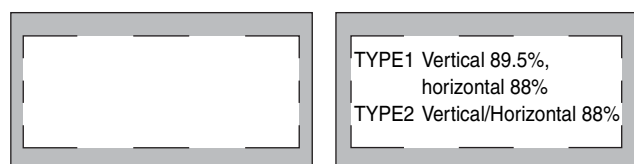
Area marker

This marker is displayed as a dotted line.



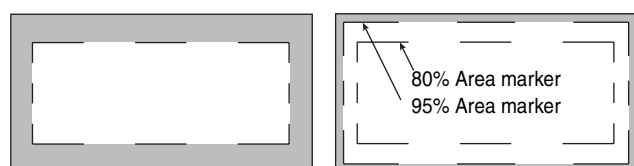
95% Area marker

93% Area marker



90% Area marker

88% Area marker



80% Area marker

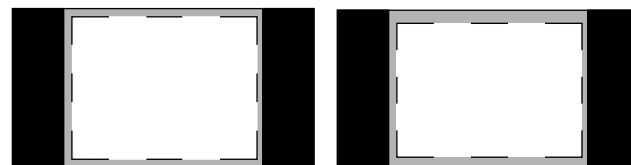
USER area marker *¹

*¹ Use the ▼ and ▲ buttons to increase or decrease the area marker in 1% increments in the range between 80 and 95%.

4:3 marker

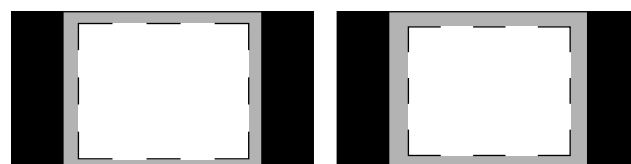
(Displayed for SD input in 4:3 aspect ratio mode)

This marker is displayed as a dotted line.



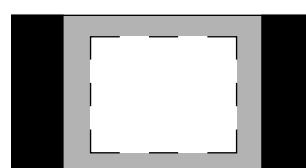
95% Area marker

93% Area marker



90% Area marker

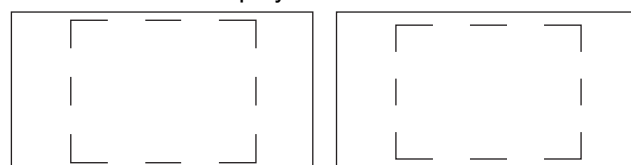
88% Area marker



80% Area marker

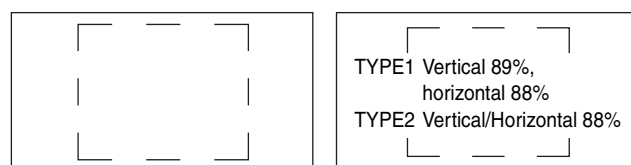
(Displayed for HD input and SD input in 16:9 ratio mode.)

This marker is displayed as a dotted line.



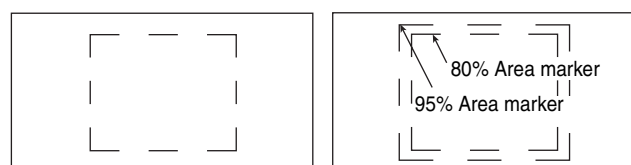
95% Area marker

93% Area marker



90% Area marker

88% Area marker




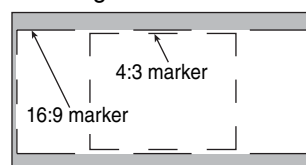
80% Area marker

USER area marker *¹

• You can display the 4:3 marker and the 16:9 marker simultaneously.

Simultaneous display example

The  section becomes the "MARKER BACK". It controls the background of the marker selected with a 16:9 ratio.



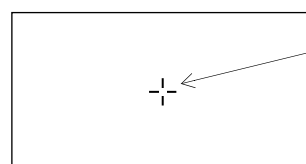
16:9 marker:

95% area marker

4:3 marker:

80% area marker

Center marker



Center marker

This marker is displayed at the center of the screen.

Main Menu (continued)

■ “CROSS HATCH”

The “CROSS HATCH” function enables display of markers at regular vertical and horizontal intervals to facilitate composition and other tasks. The width of marker lines is 1 dot, the markers consist of 1 line, and are spaced 120 dots apart (fixed value).

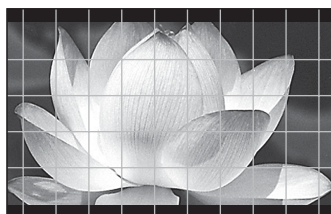
Each press of the button (“FUNCTION1” to “FUNCTION5”) to which the “CROSS HATCH” has been assigned turns the function on and off.

Each press of the **FUNCTION** button to which the “CROSS HATCH” function is assigned changes the display as shown.

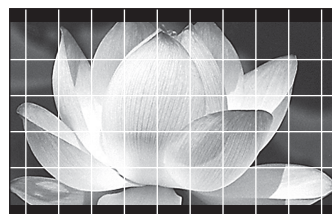
HD/SD (16:9) mode



1st press



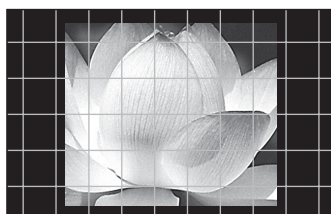
2nd press



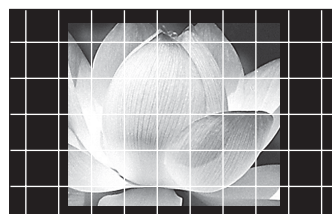
SD (4:3) mode



Light cross hatch



Dense cross hatch



3rd press (back to original image without cross hatch)

Main Menu (continued)

VIDEO CONFIG

Underlined values indicate factory defaults.

Sub menu	Settings	Description
GAMMA SELECT *1*2	STANDARD <u>STDIO/PST</u> FILM	Selects gamma curve. The gamma curve in the sub-window can be set in the split-screen display and sub-window display (single screen) of the "TWO WINDOW" function. <STANDARD> Standard mode <STDIO/PST> Color emphasis mode (a mode that approximates CRT display capability suitable for studio or postproduction application) <FILM> Film mode (For VARICAM use) The FILM mark appears at the top left of the screen when "FILM" is selected.
COLOR SPACE	SMPTE-C*7 EBU*7 ITU-709 WIDE1 WIDE2 WIDE3	Sets the color space. The color space in the sub-window can be set in the split-screen display and sub-window display (single screen) of the "TWO WINDOW" function. <SMPTE-C> SMPTE-C standard <EBU> EBU standard <ITU-709> ITU-R BT. 709 standard <WIDE1> Sets the gamma curve to 2.2 in wide color gamut (using Adobe color space) mode. <WIDE2> Sets the gamma curve to 1.8 in wide color gamut (using Adobe color space) mode. <WIDE3> Sets the gamma curve to 2.6 in wide color gamut (using D-Cinema color space) mode.
COLOR TEMP.	USER0 - 63*5 D93 <u>D65</u> D56 VAR1 VAR2 VAR3	Selects color temperature. Both the main window and sub-window can be set up in the split-screen display of the "TWO WINDOW" function. <USER 0 - 63> Adjustable settings 0 - 63 (equivalent to a color temperature range of 3,000 - 9,300K) <D93> Equivalent to a color temperature of 9,300K <D65> Equivalent to a color temperature of 6,500K <D56> Equivalent to a color temperature of 5,600K <VAR1> WB adjustment mode*4 <VAR2> WB adjustment mode*4 <VAR3> WB adjustment mode*4 USER20 is approximately 5000 K and USER33 is approximately 6300 K.
SHARPNESS MODE *2	HIGH*3 LOW	Selects the width of outline correction edge. Both the main window and sub-window can be set up in the split-screen display of the "TWO WINDOW" function. <HIGH> Thin edge <LOW> Wide edge
SHARPNESS H *2	0 - 30*3	Sets horizontal outline correction. The item display moves to the lower part of the screen during adjustment. Both the main window and sub-window can be set up in the split-screen display of the "TWO WINDOW" function.
SHARPNESS V *2	0 - 30*3	Sets vertical outline correction. The item display moves to the lower part of the screen during adjustment. Both the main window and sub-window can be set up in the split-screen display of the "TWO WINDOW" function.

*1 Changes are not reflected to a still image in the main window in the split-screen display of the "TWO WINDOW" function.

*2 These functions are not available when "RGB-COMP." under "YPbPr/RGB" or "DVI-COMP." under "DVI-D" is selected in the "INPUT SELECT" menu (→ page 36). The gamma curve is set to STANDARD when "RGB-COMP" or "DVI-COMP" is selected. Selecting WIDE1 to 3 for "COLOR SPACE" produces the gamma curve fixed to that "COLOR SPACE."

*3 The following sharpness values are available and the settings for the selected input signal is displayed. Adjustment status during selection appears at the bottom right of the screen.

1) VIDEO system input (VIDEO) (the factory defaults are SHARPNESS MODE: LOW and SHARPNESS H/V: 0)

2) HD for any other input (the factory defaults are SHARPNESS MODE: HIGH and SHARPNESS H/V: 0).

3) SD for any other input (the factory defaults are SHARPNESS MODE: LOW and SHARPNESS H/V: 0).

*4 Selecting "VAR1", "VAR2" and "VAR3" engages the WB adjustment mode (→ page 28).

*5 To select USER0 - 63,

1) Press [ENTER] ("USER" changes to blue).

2) Use [▼, ▲] to select 0 - 63 and press [ENTER].

*7 Factory default setting: SMPTE-C (U.S.A. and Canada), EBU (other countries)

Sub menu	Settings	Description
I-P MODE^{*2*6}	MODE2 <u>MODE1</u>	Selects IP conversion mode. (→ page 27, “IP mode”) Both the main window and sub-window can be set up in the split-screen display of the “TWO WINDOW” function. <MODE2> Inter-field interpolation <MODE1> Inter-frame interpolation
MONO^{*2}	<u>OFF</u> ON	Switches between color and monochrome (MONO). <OFF> Color <ON> Monochrome • When ON, the CHROMA setting of the picture/volume adjusting menu is fixed at 0.
ANAMO^{*2*8}	<u>OFF</u> ON	With an Anamo lens and HD-SDI input, the picture is resized to Anamo magnification (the vertically enlarged signal can be vertically compressed and corrected for display). This function is not available in the split screen display of the “TWO WINDOW” function.
SD ASPECT^{*2}	<u>4:3</u> 16:9	Sets the aspect ratio for SD signal input. This function is not available in the split screen display of the “TWO WINDOW” function. <4:3> 4:3 display <16:9> 16:9 display
SCAN^{*2}	<u>NORMAL</u> UNDER	Sets under-scan and normal display. This function is not available in the split screen display of the “TWO WINDOW” function. <NORMAL> Normal display <UNDER> Under-scan
COLOR GAIN R	0 - <u>30</u>	Fine tunes R component GAIN in split-screen mode and sub-window display (single screen) of the “TWO WINDOW” function.
COLOR GAIN G	0 - <u>30</u>	Fine tunes G component GAIN in sub-window input in the split-screen display and sub-window display (single screen) of the “TWO WINDOW” function.
COLOR GAIN B	0 - <u>30</u>	Fine tunes B component GAIN in sub-window input in the split-screen display and sub-window display (single screen) of the “TWO WINDOW” function.

- *6 To use the "TWO WINDOW" (→ page 34) function,
 - 1) Change settings after exiting the "TWO WINDOW" function.
 - 2) It is recommended to use "MODE2" for handling fast video.

<p>IP mode</p> <p>“MODE1” performs IP conversion using inter-frame interpolation. The factory default is “MODE1”.</p> <p>“MODE2” performs IP conversion using inter-field interpolation. Since interpolation is performed inside each field, this mode is suitable for checking interlace status.</p>
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Main Menu (continued)

■ WB adjustment mode

Select "VAR1" to "VAR3" for "COLOR TEMP." in the "VIDEO CONFIG" menu to make "WHITE BALANCE VAR1" to "WHITE BALANCE VAR3" (WB) adjustments.

Underlined values indicate factory defaults.

Sub menu	Settings	Description
COLOR TEMP. ^{*1}	USER0 - 6 D93 <u>D65</u> D56	Selects the color temperature that will become the basis for adjustment. <USER 0 - 63> Adjustable settings 0 - 63 (equivalent to a color temperature range of 3,000 - 9,300K) <D93> Equivalent to a color temperature of 9,300K <D65> Equivalent to a color temperature of 6,500K <D56> Equivalent to a color temperature of 5,600K USER20 is approximately 5000 K and USER33 is approximately 6300 K.
GAIN RED	0 - 1023 (Factory defaults are color temperature <D65> values.) • These are the adjustments made before shipment from the factory.	Adjusts the GAIN elements for RED. ^{*2}
GAIN GREEN		Adjusts the GAIN elements for GREEN. ^{*2}
GAIN BLUE		Adjusts the GAIN elements for BLUE. ^{*2}
BIAS RED	-512 - 511 (Factory default: 0)	Adjusts the BIAS elements for RED. ^{*2}
BIAS GREEN		Adjusts the BIAS elements for GREEN. ^{*2}
BIAS BLUE		Adjusts the BIAS elements for BLUE. ^{*2}
RESET	▼	Resets "GAIN RED" - "BIAS BLUE" to color temperature values selected under "COLOR TEMP."

^{*1} Selecting "COLOR TEMP." and pressing [ENTER] after making a change, opens a confirmation screen. Selecting "YES" and pressing [ENTER] in this screen resets selected GAIN and BIAS values to the selected color temperature values.

^{*2} The item display moves to the lower part of the screen during adjustment.

Main Menu (continued)

SYSTEM CONFIG

Underlined values indicate factory defaults.

Sub menu	Settings	Description
B.LIGHT/CONT.	<u>BACKLIGHT</u> CONTRAST	Selects function to be assigned to BACKLIGHT/CONT. in the picture/volume adjusting menu. <BACKLIGHT> Adjusts the BACKLIGHT. <CONTRAST> Adjusts the CONTRAST.
BACKLIGHT	0 - <u>50</u>	Adjusts the backlight when the B.LIGHT/CONT. submenu is set to CONTRAST.
MENU POSITION	<u>CENTER</u> LB RB RT LT	Positions the on-screen menu. <CENTER> Center of the screen <LB> Left Bottom <RB> Right Bottom <RT> Right Top <LT> Left Top
STATUS DISPLAY	OFF <u>3SEC OFF</u> CONTINUE	Sets display state for input signal status (on-screen menu). <OFF> Not displayed. <3SEC OFF> Displayed for 3 seconds after a status change. <CONTINUE> Displayed at all times
SETUP LOAD	USER5 ^{*1*2} USER4 ^{*1*2} USER3 ^{*1*2} USER2 ^{*1*2} USER1 ^{*1*2} <u>FACTORY</u>	Loads saved factory defaults (FACTORY) or user data (USER1 - USER5). After loading user data, the screen displays the signal selected before user data was loaded.
SETUP SAVE	USER5 ^{*2} USER4 ^{*2} USER3 ^{*2} USER2 ^{*2} <u>USER1</u> ^{*2}	Up to 5 sets of user data can be saved (→ page 20). They save menu settings and adjustments made in the picture/volume adjusting menu (PHASE/CHROMA/BRIGHT/CONTRAST/BACKLIGHT) except "SETUP SAVE/SETUP LOAD."
POWER ON SETUP	USER5 USER4 USER3 USER2 USER1 FACTORY <u>LAST</u>	Selects the settings used when the power is turned on. <LAST> Starts in the mode used when the power was last turned off. <FACTORY> Starts up using the factory defaults. <USER1 - 5> Starts up using USER registered settings.
POWER SAVE MODE	<u>OFF</u> ON	Sets the power save mode <OFF> Does not activate the POWER SAVE mode. <ON> The backlight dims when no signal (NO SIGNAL) is input for 60 seconds or longer. Signal input or menu operation will return the backlight to its normal brightness.
CALIBRATION	▼	Connect a CA-210 color analyzer and use this submenu to make a calibration. It also returns calibration data to factory defaults. (→ page 30, 31)

*1 When the monitor is shipped, settings for "USER1" - "USER5" are identical to "FACTORY."

*2 "H POSITION", "V POSITION", "PHASE" and "CLOCK" (→ page 37) cannot be saved or loaded.

Main Menu (continued)

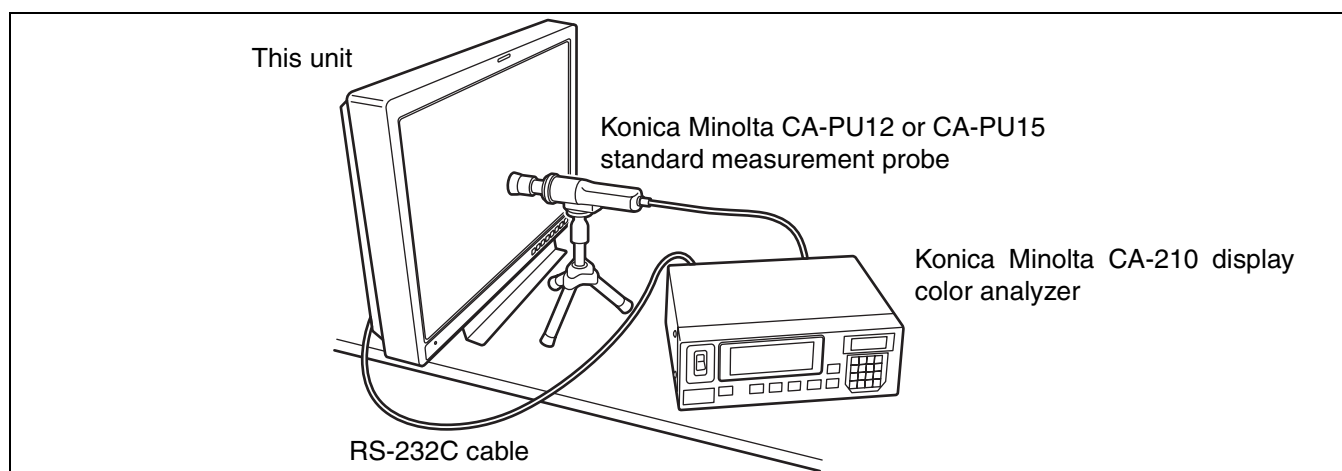
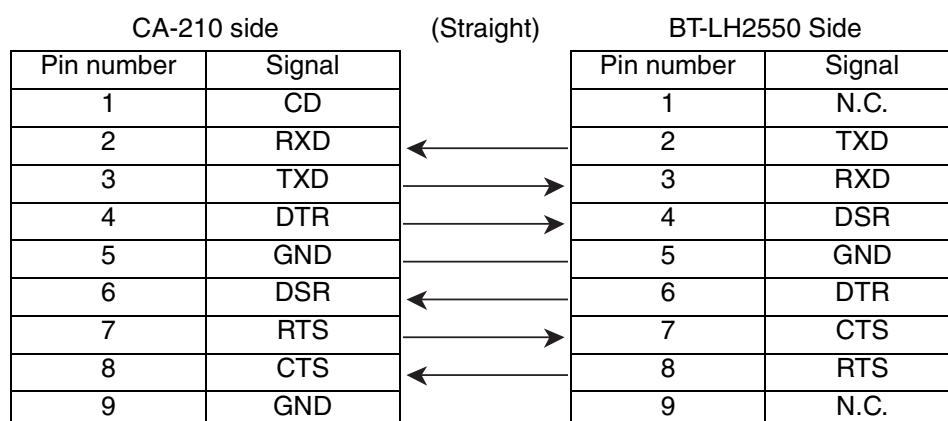
■ CALIBRATION

The CALIBRATION function in this unit measures LCD panel characteristics from low to high brightness values and internal monitor processing handles CALIBRATION.

CALIBRATION does not rely on image quality settings since internal signals are used for a calibration. CALIBRATION in this unit is made at D65 color temperature and calibrations for other color temperatures are results calculated from this value.

■ Equipment required for calibration

- Konica Minolta CA-210 display color analyzer
 - Konica Minolta CA-PU12 or CA-PU15 standard measurement probe
 - RS-232C cable (male to male, straight)
- Connect the RS-232C terminal on this unit to the RS-232C terminal on the CA-210 display color analyzer using a straight cable.



- Be sure to set the following calibration values on the CA-210 display color analyzer. The analyzer will not produce a correct calibration unless it has been calibrated. For details on setup procedures, refer to the CA-210 User's Guide.

Calibration	W	R	G	B
x	0.3091	0.6759	0.2029	0.1495
y	0.3429	0.3126	0.691	0.0587
Lv	195.3	47.56	135.2	13.21

- Turn on this unit and perform adequate aging (about 1 hour) before starting calibration.
- Turn off the lights in the room and make sure that no external light can enter the standard measurement probe before starting the calibration. External light that enters the probe will prevent correct calibration of low brightness characteristics.
- LCD panel characteristics and instrument error in the display color analyzer may sometimes result in small differences in values after calibration.
In a fine tuning of the monitor, also set GAIN and BIAS for R, G and B in the COLOR TEMP. VAR mode.
- Do not apply the probe to a WFM/VECTOR display on the screen.

Main Menu (continued)

CALIBRATION

Select CALIBRATION in the “SYSTEM CONFIG” menu to open the following menus.

Sub menu	Setting	Description
AUTO CALIBRATION *1	▼	Connect a CA-210 color analyzer and use this submenu to make a calibration. Select “AUTO CALIBRATION” and select “YES” in the confirmation screen that appears to start calibration.
RESET *2	▼	Returns calibration data to their factory defaults. Select “RESET” and select “YES” in the confirmation screen that appears to return calibrated values to their factory defaults.

*1 “EXECUTING” is displayed during “AUTO CALIBRATION” and “COMPLETE” appears when calibration ends.
“INCOMPLETE” appears if calibration could not be completed.

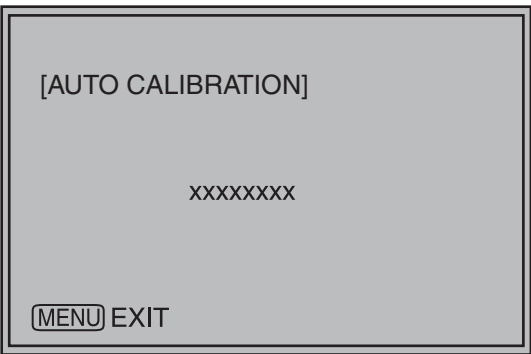
*2 When “RESET” ends, “COMPLETE” appears.

Performing AUTO CALIBRATION

- Press [▼,▲] in the “SYSTEM CONFIG” menu, select the [CALIBRATION] submenu and press [ENTER].
- Press [▼,▲], select the [AUTO CALIBRATION] submenu and press [ENTER].



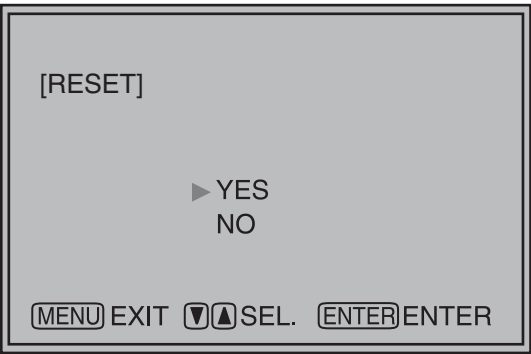
- Select “YES” and press [ENTER].
This starts calibration.



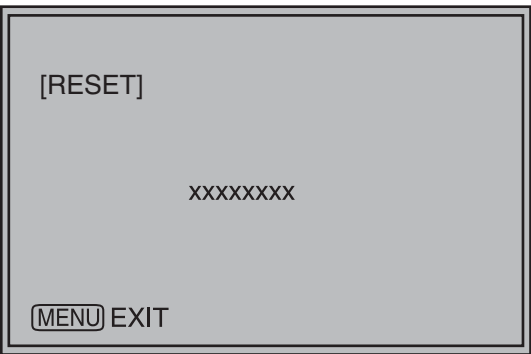
xxxxxxx indicates that one of the following messages with the meaning listed below appears.
EXECUTING: Operation in progress
COMPLETE: Operation completed
INCOMPLETE: Operation did not complete.
(Check RS-232C cable connection.)

RESET operation

- Press [▼,▲] in the “SYSTEM CONFIG” menu, select the [CALIBRATION] submenu and press [ENTER].
- Press [▼,▲], select the [RESET] submenu and press [ENTER].



- Select “YES” and press [ENTER].
This starts calibration.



xxxxxxx indicates that the following message with the meaning listed below appears.
COMPLETE: Operation completed

Main Menu (continued)

FUNCTION

Underlined values indicate factory defaults.

Sub menu	Settings	Description
FUNCTION 1 - FUNCTION 5	HV DELAY AUTOSETUP BLUE ONLY GAMMA SELECT COLOR SPACE SD ASPECT SCAN TWO WINDOW SUB INPUT SEL. WFM/VECTOR MARKER LEVEL METER CROSS HATCH MONO TIME CODE CLOSED CAPTION ANAMO UNDEF (Factory default: FUNCTION1: MARKER FUNCTION2: WFM/VECTOR FUNCTION3: TWO WINDOW FUNCTION4: TIME CODE FUNCTION5: LEVEL METER)	Selects functions to be assigned to [FUNCTION1] - [FUNCTION5] (front panel buttons). <HV DELAY> Displays synchronizing signals (horizontal, vertical). The display changes in the following order. DELAY OFF → H DELAY → V DELAY → HV DELAY → DELAY OFF <AUTOSETUP> Performs auto setup for PC display. <BLUE ONLY> Cuts the red and green signals. Use this function to check phase and chroma. This button toggles between ON and OFF. <GAMMA SELECT>*1 Displays the gamma curve. The display changes in the following order. GAMMA STANDARD → GAMMA FILM → GAMMA STUDIO/PST → GAMMA STANDARD <COLOR SPACE> Sets the color space. The display changes in the following order. EBU → ITU-709 → WIDE1 → WIDE2 → WIDE3 → SMPTE-C → EBU <SD ASPECT> Switches between "16:9" and "4:3".*1 <SCAN> Switches between "UNDER SCAN" and "NORMAL SCAN".*1 <TWO WINDOW> Sets the split-screen function.*1 The display changes in the following order. • When the input signal terminals of video displayed in the sub-window and main window differ SINGLE MAIN → TWO (L/S, M/M, S/L) → SINGLE SUB → SINGLE MAIN • When video from the same input signal terminal is displayed in the sub-window and main window SINGLE MAIN → TWO(L/S, M/M, S/L) → STILL → SINGLE SUB → SINGLE MAIN <SUB INPUT SEL.> Switches sub-window inputs in split screen mode. <WFM/VECTOR> Displays waveform or vector display. <MARKER> Turns the marker on and off. <LEVEL METER> Turns the LEVEL METER display On and Off. <TIME CODE> Turns the time code display on and off. <MONO> Switches between color and monochrome. <CLOSED CAPTION> Turns the closed caption display on and off. <ANAMO> Turns ANAMO On and Off. <UNDEF> Undefined
FUNCTION DISPLAY	OFF ON1 <u>ON2</u>	Selects display of functions assigned to [FUNCTION1] - [FUNCTION5] (front panel buttons). It also selects button action (1-touch, 2-touch, off). <ON1> 1-touch action to display and perform functions. <ON2> 2-touch action to display and perform functions. <OFF> No function display.

*1 Changes in settings change menu settings.

Main Menu (continued)

■ FUNCTION setting restrictions

Settings are not available under the following conditions.

Setting	Conditions that disable operation
HV DELAY	In TWO WINDOW and WFM mode, "INVALID FUNCTION" appears to indicate that operation is disabled. When "RGB-COMP." is selected under "YPbPr/RGB" or "DVI-COMP." is selected under "DVI-D" in the "INPUT SELECT" menu, "INVALID FUNCTION" appears to indicate that operation is disabled.
AUTO SETUP	When something other than "RGB-COMP." is selected under "YPbPr/RGB" in the "INPUT SELECT" menu, "NOT RGB-COMP. CH" appears to indicate that operation is disabled. When "RGB-COMP." is selected under "YPbPr/RGB" in the "INPUT SELECT" menu and no signal is input, "INCOMPLETE" appears to indicate that operation is disabled.
GAMMA SELECT	When GPI is set, "INVALID FUNCTION" appears to indicate that operation is disabled. When "RGB-COMP." is selected under "YPbPr/RGB" or "DVI-COMP." is selected under "DVI-D" in the "INPUT SELECT" menu, "INVALID FUNCTION" appears to indicate that operation is disabled.
SD ASPECT	When GPI is set, "INVALID FUNCTION" appears to indicate that operation is disabled. In TWO WINDOW mode and HD signal display, "INVALID FUNCTION" appears to indicate that operation is disabled.
SCAN	When GPI is set, "INVALID FUNCTION" appears to indicate that operation is disabled. In TWO WINDOW mode, "INVALID FUNCTION" appears to indicate that operation is disabled.
TWO WINDOW	When "RGB-COMP." is selected under "YPbPr/RGB" or "DVI-COMP." is selected under "DVI-D" in the "INPUT SELECT" menu, the display toggles between single screen display of the main window and sub-window. When WINDOW SIZE is something other than M/M, the SINGLE MAIN and SINGLE SUB screens appear alternately, but no still image screen appears. When the input signal terminals of video displayed in the main window and sub-window differ, the SINGLE MAIN and SINGLE SUB windows appear alternately, but no still image screen appears.
WFM/VECTOR	In TWO WINDOW mode, "INVALID FUNCTION" appears to indicate that operation is disabled. When "RGB-COMP." or "RGB-VIDEO" is selected under "YPbPr/RGB", or "DVI-COMP." or "DVI-VIDEO" is selected under "DVI-D" in the "INPUT SELECT" menu, "INVALID FUNCTION" appears to indicate that WFM operation is disabled. The VECTOR display does not appear for signals other than SDI input.
MARKER	When "RGB-COMP." is selected under "YPbPr/RGB" or "DVI-COMP." is selected under "DVI-D" in the "INPUT SELECT" menu, "INVALID FUNCTION" appears to indicate that operation is disabled. When GPI is set during TWO WINDOW operation, "INVALID FUNCTION" appears to indicate that operation is disabled.
LEVEL METER	When input is something other than SDI, "INVALID FUNCTION" appears to indicate that operation is disabled.
MONO	When GPI is set, "INVALID FUNCTION" appears to indicate that operation is disabled.
TIMECODE	When input is something other than HD-SDI input, "INVALID FUNCTION" appears to indicate that operation is disabled.
ANAMO	When input is something other than HD-SDI signal input, "INVALID FUNCTION" appears to indicate that operation is disabled.

Main Menu (continued)

■ Functions displayed during FUNCTION button operation

Pressing any of the [FUNCTION1] to [FUNCTION5] buttons displays the operations assigned to each button as shown below.

- **HV DELAY**
DELAY OFF, H DELAY, V DELAY, HV DELAY
- **AUTOSETUP**
COMP.AUTOSETUP, COMPLETE, INCOMPLETE,
NOT RGB-COMP.CH
- **BLUE ONLY**
BLUE ONLY ON, BLUE ONLY OFF
- **GAMMA SELECT**
GAMMA STANDARD, GAMMA FILM,
GAMMA STDIO/PST
- **COLOR SPACE**
COLOR SPACE SMPTE-C, COLOR SPACE EBU,
COLOR SPACE ITU-709, COLOR SPACE WIDE1,
COLOR SPACE WIDE2, COLOR SPACE WIDE3
- **SD ASPECT**
4:3, 16:9
- **SCAN**
NORMAL SCAN, UNDER SCAN
- **TWO WINDOW**
SINGLE MAIN, TWO L/S, TWO M/M, TWO S/L,
STILL, SINGLE SUB
- **SUB INPUT SEL.**
VIDEO, SDI1, SDI2, YP_BPR/RGB, DVI-D
- **WFM/VECTOR**
WFM ON, WFM/VECTOR OFF, VECTOR × 1,
VECTOR × 2, VECTOR × 4, VECTOR × 8
- **MARKER**
MARKER OFF, 4:3 MARKER, 13:9 MARKER,
14:9 MARKER, VISTA MARKER,
CNSCO MARKER, 95% MARKER, 93% MARKER,
90% MARKER, 88% MARKER, 80% MARKER,
xx% MARKER (xx% indicates an 80 to 95% USER
setting), MARKER ON
- **AUDIO LEVEL METER**
METER OFF, METER 2CH, METER 4CH,
METER 8CH
- **CROSS HATCH**
CROSS HATCH HIGH, CROSS HATCH LOW,
CROSS HATCH OFF
- **MONO**
MONO ON, MONO OFF
- **TIME CODE**
LTC, VITC, LUB, VUB, TC OFF
- **CLOSED CAPTION**
CC1, CC2, CC3, CC4, CC OFF
- **ANAMO**
ANAMO ON, ANAMO OFF

■ “HV DELAY”

This displays the blanking period. Each press of the button changes the display as follows: “H blanking display” → “V blanking display” → “H and V blanking display” → “no blanking display.”

Main Menu (continued)

GPI

“GPI CONTROL” is used to enable and disable GPI functions and assign functions to each of the GPI terminal pins (→ page 48).

Underlined values indicate factory defaults.

Sub menu	Settings	Description
GPI CONTROL	<u>DISABLE</u> ENABLE	Enables and disables GPI functions <DISABLE> Disabled <ENABLE> Enabled
GPI1 - GPI8	<u>UNDEF</u> MARKER1 ON/OFF MARKER2 ON/OFF MARKER BACK HALF MARKER BACK BLACK CENTER MARKER INPUT SEL. VIDEO INPUT SEL. SDI1 INPUT SEL. SDI2 INPUT SEL. YP _B Pr/RGB INPUT SEL. DVI-D SD ASPECT SCAN R-TALLY G-TALLY MONO GAMMA SEL. FILM GAMMA SEL. STDIO/PST SELECT SYNC	Assigns functions to the GPI control terminal pins. The same items can be set to each terminal (→ page 48).

Note:

This function is not available when,

- “SD ASPECT” operation when input signal is HD or PC
- “SCAN” operation when the input signal is PC
- “GAMMA SELECT” operation when the input signal is PC
- “SELECT SYNC” operation when anything other than “RGB-VIDEO” is selected under “YP_BPr/RGB” in the “INPUT SELECT” menu
- “MONO” operation when input signal is PC

Main Menu (continued)

INPUT SELECT

Underlined values indicate factory defaults.

Sub menu	Settings	Description
VIDEO	OFF <u>ON</u>	Turns VIDEO line to the INPUT button on/off. *1
FORMAT	<u>AUTO</u> NTSC PAL	Selects the video input format. *2 <AUTO> Automatically selects NTSC or PAL. <NTSC> NTSC <PAL> PAL
NTSC SETUP	75 <u>00</u>	Selects NTSC setup level. <75> Select this function when using 7.5% setup signals. (Adjusts the interior of the monitor to the 7.5% setup level to suit the black level) <00> Select this when there is no setup signal.
SDI1	OFF <u>ON</u>	Turns SDI1 line to the INPUT button on/off. *1
SDI2	OFF <u>ON</u>	Turns SDI2 line to the INPUT button on/off. *1
YP_BP_R/RGB	OFF <u>ON</u>	Turns YP _B P _R /RGB line to the INPUT button on/off. *1
MODE	<u>YP_BP_R</u> RGB-VIDEO RGB-COMP.	Selects YP _B P _R (component) or RGB input mode. <YP _B P _R > Selects the YP _B P _R signal. <RGB-VIDEO> Selects the video RGB signal. <RGB-COMP.> Selects the PC RGB signal.
COMPONENT LEVEL	<u>SMPTE</u> B75 B00	Selects YP _B P _R (component) signal input level. <SMPTE> Signal level complies with SMPTE and P _B and P _R are 0.7 Vp-p at 100% chroma. <B75> Select this when connecting a Betacam or similar device with a setup function. (Adjusts the interior of the monitor to the 7.5% setup level to suit the black level) <B00> Select this when connecting a Betacam or similar device without a setup function.
SELECT SYNC	<u>INT</u> EXT	Selects the sync signal when using YP _B P _R and RGB-VIDEO input. <INT> Select when the synchronizing signal is superimposed on the G or Y signal. <EXT> Select to synchronize with an external synchronizing signal.
COMP.	▼	Performs analog PC settings. ("COMP." → page 37)
DVI-D	OFF <u>ON</u>	Turns DVI-D line to the INPUT button on/off. *1
MODE	<u>DVI-VIDEO</u> DVI-COMP.	Selects DVI-D input mode. <DVI-VIDEO> Selects the RGB signal input of RGB video. <DVI-COMP.> Selects PC input.

*1 All five input lines (VIDEO, SDI1, SDI2, YP_BP_R/RGB, DVI-D) cannot be turned off. An attempt to turn off all inputs ends when the fourth input line is turned off since it will not be possible to turn off the 5th input line also.

*2 "AUTO" is the factory default, but select a specific format when there is risk that the input signal may be contaminated by outside noise.

Main Menu (continued)

■ COMP.

Set "RGB-COMP" under "YPbPr/RGB" in the "INPUT SELECT" menu and select the "RGB-COMP" input line to enable the "COMP" menu.

Underlined values indicate factory defaults.

Sub menu	Settings	Description
AUTOSETUP *1	▼	Automatically adjusts RGB-COMP as well as H POSITION, V POSITION, PHASE and CLOCK settings of input formats. Selecting this submenu opens a confirmation screen and setup starts after choosing "YES" in this screen.
H POSITION	0 - <u>30</u> - 60	Adjusts horizontal image display position.*2
V POSITION	0 - <u>30</u> - 60	Adjusts vertical image display position.*2
PHASE	0 - <u>16</u> - 60	Adjusts the clock phase in 1/32 clock period increments.*2
CLOCK	700 - 2200 (Factory preset settings:*3)	Adjusts the sampling clock in dot units.*2
WXGA/XGA	<u>XGA</u> WXGA	Switches between XGA (UXGA) and WXGA (WUXGA).
RESET	▼	Returns "H POSITION", "V POSITION", "PHASE" and "CLOCK" settings in the RGB COMP. input compliant format to their factory defaults.

*1 Run "AUTOSETUP" when video is displayed across the entire screen area. "EXECUTING" is displayed during "AUTOSETUP" and "COMPLETE" appears when setup completes.

"INCOMPLETE" is displayed if setup could not be completed.

AUTOSETUP may not provide adequate adjustment for some video input. Use H POSITION, V POSITION, PHASE and CLOCK to adjust.

*2 Each input format can be adjusted but not when user data is loaded ("SETUP LOAD" → page 29) or saved ("SETUP SAVE" → page 29).

*3 "CLOCK" factory default

FORMAT	CLOCK	FORMAT	CLOCK
640 × 400 (70 Hz)	800	1024 × 768 (70 Hz)	1328
640 × 480 (60 Hz)	800	1024 × 768 (75 Hz)	1312
640 × 480 (75 Hz)	840	1024 × 768 (85 Hz)	1376
640 × 480 (85 Hz)	832	1280 × 768 (50 Hz)	1648
800 × 600 (60 Hz)	1056	1280 × 768 (60 Hz)	1680
800 × 600 (70 Hz)	1040	1280 × 768 (75 Hz)	1712
800 × 600 (75 Hz)	1056	1280 × 1024 (60 Hz)	1688
800 × 600 (85 Hz)	1048	1600 × 1200 (60 Hz)	2160
1024 × 768 (60 Hz)	1344	1920 × 1200 (60 Hz)	2080

Main Menu (continued)

AUDIO

Use the following submenus to set headphone output and audio level meters.

Underlined values indicate factory defaults.

Sub menu	Settings	Description
INPUT SELECT	<u>AUTO</u> ANALOG	Selects input line for audio output to headphone terminal. <AUTO> When an SDI input line is selected with the [INPUT] button on the front panel: embedded audio (SDI terminal) When input lines other than SDI1 or SDI2 are selected with the [INPUT] button on the front panel: analog (AUDIO input terminal) <ANALOG> Analog (AUDIO input terminal)
EMBEDDED SELECT L	CH1 - CH8 (Factory default: CH1)	Selects embedded audio channel output to the left (L) speaker.
EMBEDDED SELECT R	CH1 - CH8 (Factory default: CH2)	Selects embedded audio channel output to the right (R) speaker.
LEVEL METER*1	<u>OFF</u> ON	Selects/turns off the audio level meter displayed by OSD.
CH SELECT	<u>8CH</u> 4CH 2CH	Selects the number of audio level meter channels.
0dB POINT	OFF <u>ON</u>	Selects and turns off 0 dB line on/off displayed on the audio level meter.
CH INFO.	OFF <u>ON</u>	Selects and turns off displays on the audio level meter.

*1 When ANALOG is selected in the "INPUT SELECT" menu, the LEVEL METER does not indicate the audio level meter even when set to ON.

Main Menu (continued)

DISPLAY SETUP

Underlined values indicate factory defaults.

Sub menu	Settings	Description
TWO WINDOW SIZE	L/S <u>M/M</u> S/L	Selects size of split-screen displays. <L/S> main window LARGE, sub-window SMALL <M/M> main window MEDIUM, sub-window MEDIUM <S/L> main window SMALL, sub-window LARGE
SUB INPUT SEL.	<u>VIDEO</u> SDI1 SDI2 YPbPr/RGB DVI-D	Selects sub-window input in split-screen display.
WFM/ VECTOR	<u>OFF</u> WFM VECTOR	Switches between "WFM/VECTOR" waveform and vector display. <WFM> Displays waveforms. <VECTOR> Displays vector waveforms.*3
POSITION	LB <u>RB</u> RT LT	Selects the position for the "WFM/VECTOR" waveform display.*3 <LB> Left Bottom <RB> Right Bottom <RT> Right Top <LT> Left Top
VECTOR MODE	× 8 × 4 × 2 <u>× 1</u>	Enlarges vector waveforms.*3 <× 8> 8× <× 4> 4× <× 2> 2× <× 1> 1×
VECTOR SCALE	<u>100%</u> 75%	Determines the scale of vector waveform. <100%> Displays it at 100% scale. <75%> Displays it at 75% scale.
TIME CODE	<u>OFF</u> ON	Turns the time code display on and off.*1
POSITION	TOP LEFT <u>CENTER</u> RIGHT	Selects position of time code display. <TOP> Top center of screen <LEFT> Bottom left of screen <CENTER> Bottom center of screen <RIGHT> Bottom right of screen
FONT SIZE	<u>LARGE</u> SMALL	Selects font size of time code display. <LARGE> Twice the height and width of menu font size <SMALL> Menu font size
MODE SELECT	<u>LTC</u> VITC LUB VUB	Selects time code display mode.*1 <LTC> Displays linear time code (LTC). <VITC> Displays vertical interval time code (VITC). <LUB> Displays user bits included in LTC. <VUB> Displays user bits included in VITC.
CLOSED CAPTION	<u>OFF</u> ON	Turns closed caption display on and off.*2
MODE SELECT	CC4 CC3 CC2 <u>CC1</u>	Selects the closed caption display mode.*2

*1 Available during HD-SDI input signals.

*2 Available during VIDEO (NTSC) input. Closed captions appear as bright lines on line 21 when closed caption is set to ON and underscan is also on.

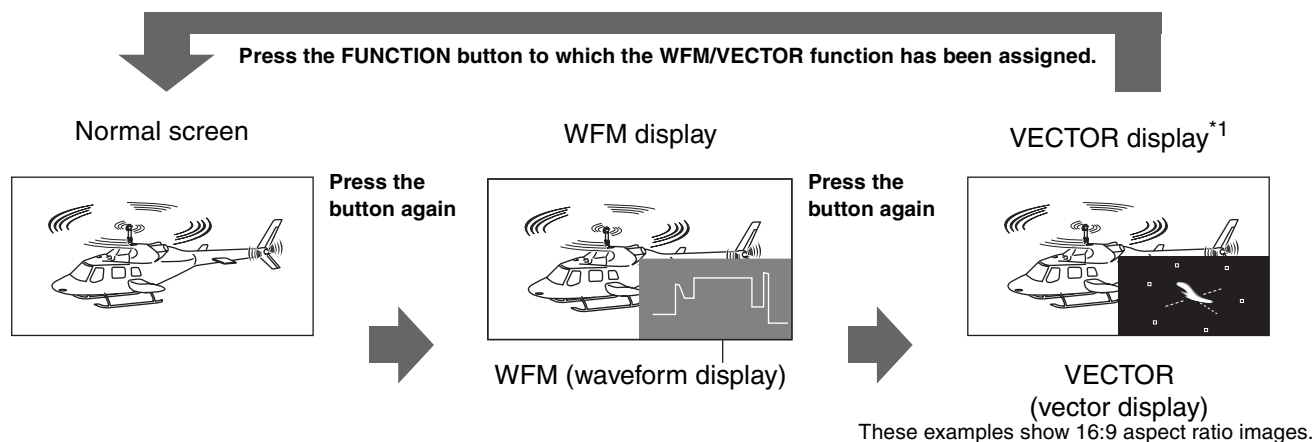
*3 Opens the vector display during SDI signal input.

Main Menu (continued)

■ “WFM/VECTOR”

The “WFM/VECTOR” function enables display of the waveform and vector display. Use “DISPLAY SETUP” in the main menu to select “WFM” and “VECTOR” display. (→ page 39)

Press the button ([FUNCTION1] to [FUNCTION5] (→ page 32)) to which the “WFM/VECTOR” function has been assigned to turn the function on and off. (This assumes that the “WFM/VECTOR” function has been assigned to any of the [FUNCTION1] to [FUNCTION5] buttons.)



^{*1} Displayed only for SDI signal input.

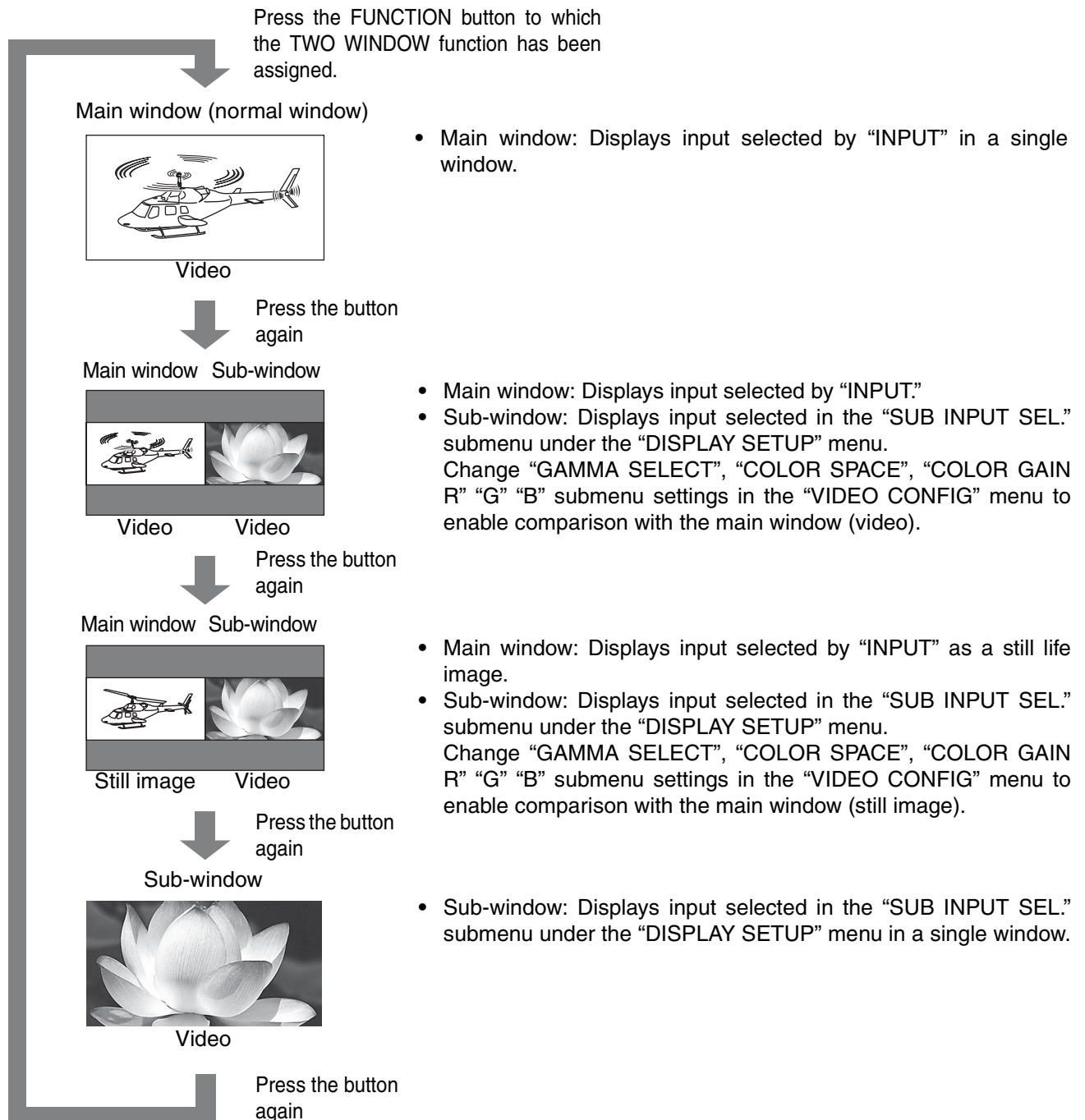
Main Menu (continued)

■ TWO WINDOW function

The "TWO WINDOW" function displays two inputs selected from VIDEO, SDI1/2, YP_BP_R/RGB or DVI-D in two windows.

Each press of the button ([FUNCTION1] to [FUNCTION5]) (page 32) to which the "TWO WINDOW" function has been assigned changes the display mode.

(In the factory default setting, it is assigned to FUNCTION3.)



Note:

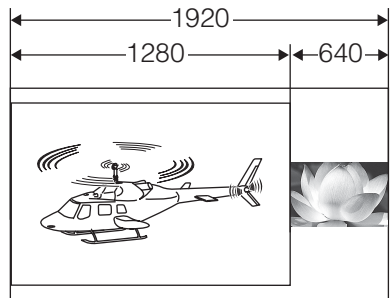
- When the main window and sub-window input setting is "YP_BP_R/RGB" and "RGB-COMP," the main window and sub-window are displayed in a single window. When the input settings for the main window and sub-window are both "DVI-COMP," they are also displayed in a single window.
- When the input signals selected in the main and sub-window differ, the color shade, etc. may differ slightly.
- When the input signal terminals of video displayed in the main window and sub-window differ, the still image function does not work.
- The main window is normally displayed on the left side.
- When SDI1 or SDI2 is selected for the main window and sub-window, both windows will show the same screen.

Main Menu (continued)

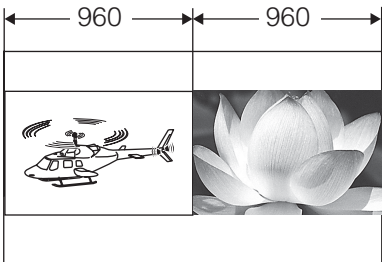
■ TWO WINDOW size

The “TWO WINDOW SIZE” setting in the “DISPLAY SETUP” menu determines the size of the main window and sub-window.

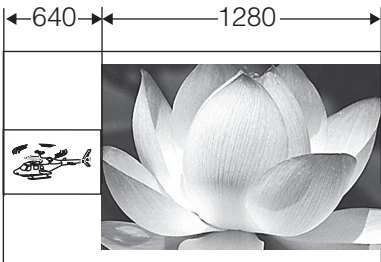
- Main window (SD) and sub-window (SD)



“TWO WINDOW SIZE” setting: L/S
Display size: 4:3 or 5:4

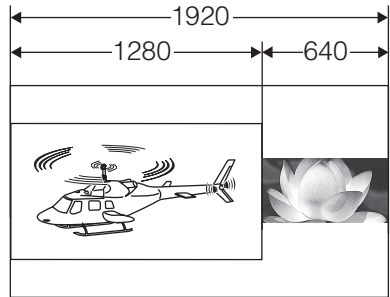


“TWO WINDOW SIZE” setting: M/M

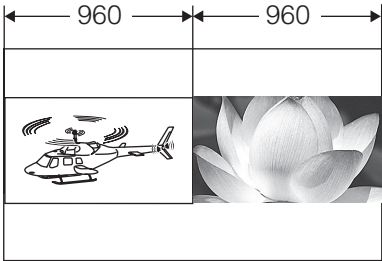


“TWO WINDOW SIZE” setting: S/L

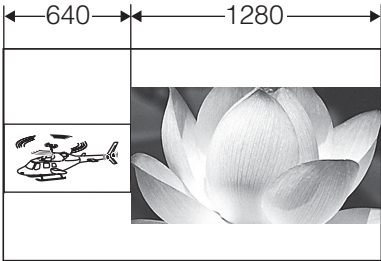
- Main window (HD) and sub-window (HD)



“TWO WINDOW SIZE” setting: L/S
Display size: 16:9 or 16:10



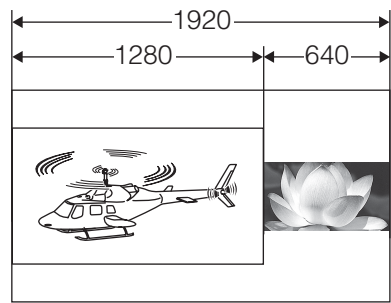
“TWO WINDOW SIZE” setting: M/M



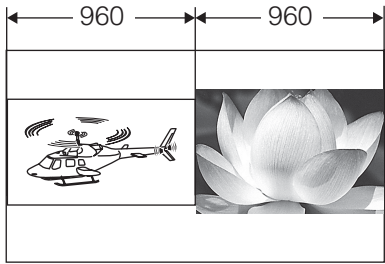
“TWO WINDOW SIZE” setting: S/L

Main Menu (continued)

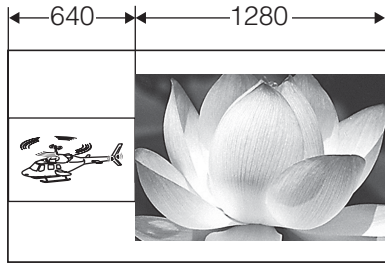
- Main window (HD) and sub-window (SD)



“TWO WINDOW SIZE” setting: L/S
Display size of main window: 16:9 or 16:10
Display size of sub-window: 4:3 or 5:4

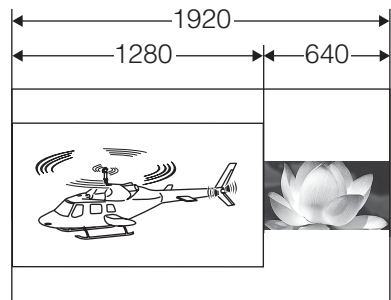


“TWO WINDOW SIZE” setting: M/M

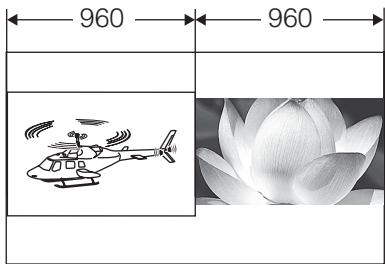


“TWO WINDOW SIZE” setting: S/L

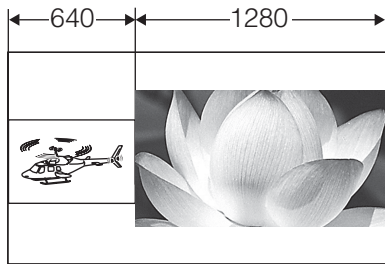
- Main window (SD) and sub-window (HD)



“TWO WINDOW SIZE” setting: L/S
Display size of main window: 4:3 or 5:4
Display size of sub-window: 16:9 or 16:10



“TWO WINDOW SIZE” setting: M/M



“TWO WINDOW SIZE” setting: S/L

- When the main window and sub-window display video from the same input line, TWO WINDOW SIZE is M/M.

Main Menu (continued)

■ TWO WINDOW screen sync

In single screen display, the TWO WINDOW screen is synchronized to the frame rate frequency of the input signal format.

In split screen display, the screen used as a reference for synchronization changes with the input signal format and "TWO WINDOW SIZE" settings as shown in the following table.

Screen synchronization and display in split-screen mode

TWO WINDOW SIZE	Sub-window Input signal format		1035i 1080i 1080/24PsF	1080p 720p	NTSC PAL 480i/p 576i/p DVI-COMP.	No input or incompatible format
	Main window Input signal format					
L/S	1035i 1080i 1080/24PsF		Main window sync Split-screen display			Main window sync Single screen display
	1080p 720p					
	NTSC PAL 480i/p 576i/p DVI-COMP.					
	No input or incompatible format		Not displayed.			
M/M	1035i 1080i 1080/24PsF		Main window sync Split-screen display			Main window sync Single screen display
	1080p 720p					
	NTSC PAL 480i/p 576i/p DVI-COMP.					
	No input or incompatible format		Sub-window sync Single screen display			Not displayed.
S/L	1035i 1080i 1080/24PsF		Sub-window sync Split-screen display			Not displayed.
	1080p 720p					
	NTSC PAL 480i/p 576i/p DVI-COMP.					
	No input or incompatible format		Sub-window sync Single screen display			

- No screen is displayed when the screen is not synchronized to the reference sync or the reference sync is not input or is in an incompatible format.
- When the frame frequency of the input signal formats of the main window and sub-window differ, frames may be skipped in the screen that is not synchronized to the reference sync.

Main Menu (continued)

CONTROL

Underlined values indicate factory defaults.

Sub menu	Settings	Description
CONTROL	<u>LOCAL</u> REMOTE	Selects operation. (with control clock) <LOCAL> Enables front panel operation <REMOTE> Enables remote operation (front panel operation is locked)* ¹
LOCAL ENABLE * ²	<u>DISABLE</u> . INPUT	Selects the disabled operation on the front panel when selecting "REMOTE" under "CONTROL". <DISABLE> Disables all front panel operations. <INPUT> Operation using button other than the [INPUT] button is invalid.

*¹ The menu can be displayed when the lock is engaged.

Only "CONTROL/LOCAL ENABLE" menu items are available when the lock is engaged.

The picture/volume adjusting menu does not accept changes when the lock is engaged.

The "LOCAL ENABLE" setting determines operations in lock mode.

The key mark is displayed during lock engagement.



*² Only available when "REMOTE" is selected under "CONTROL."

HOURLMETER

Sub menu	Settings	Description
OPERATION	XXXXXXh* ³	Displays the number of hours it has been on.
LCD	XXXXXXh* ³	Displays the number of hours that the backlight has been on.

*³ "XXXXXX" indicates the number of hours.

"XXXXXX": 300000 hours or greater is displayed as "OVER".

Main Menu (continued)

■ List of setting restrictions (○: available, ×: not available)

Input CH		VIDEO	SDI 1/2		YPbPr		RGB-VIDEO		RGB-COMP.	DVI-VIDEO		DVI-COMP.
CH			SD	HD	SD	HD	SD	HD		SD	HD	
MARKER	MARKER* ¹	○	○	○	○	○	○	○	×	○	○	×
	16:9* ¹	○	○	○	○	○	○	○	×	○	○	×
	4:3* ¹	○	○	○	○	○	○	○	×	○	○	×
	BACK* ¹	○	○	○	○	○	○	○	×	○	○	×
	CENTER* ¹	○	○	○	○	○	○	○	×	○	○	×
	GPI PRESET1* ¹	○	○	○	○	○	○	○	×	○	○	×
	GPI PRESET2* ¹	○	○	○	○	○	○	○	×	○	○	×
	MARKER TYPE* ¹	○	○	○	○	○	○	○	×	○	○	×
	CROSS HATCH* ²	○	○	○	○	○	○	○	○	○	○	○
VIDEO CONFIG	GAMMA SELECT* ³	○	○	○	○	○	○	○	×	○	○	×
	COLOR SPACE * ³	○	○	○	○	○	○	○	○	○	○	○
	COLOR TEMP.* ⁴	○	○	○	○	○	○	○	○	○	○	○
	SHARPNESS MODE* ⁴	○	○	○	○	○	○	○	×	○	○	×
	SHARPNESS H* ⁴	○	○	○	○	○	○	○	×	○	○	×
	SHARPNESS V* ⁴	○	○	○	○	○	○	○	×	○	○	×
	I-P MODE* ⁴	○	○	○	○	○	○	○	×	×	○	×
	MONO* ⁴	○	○	○	○	○	○	○	×	○	○	×
	ANAMO* ¹	○	○	○	○	○	○	○	×	○	○	×
	SD ASPECT* ¹	○	○	×	○	×	○	×	×	○	×	×
	SCAN* ¹	○	○	○	○	○	○	○	×	○	○	×
	COLOR GAIN R * ³	○	○	○	○	○	○	○	×	○	○	○
	COLOR GAIN G * ³	○	○	○	○	○	○	○	×	○	○	○
	COLOR GAIN B * ³	○	○	○	○	○	○	○	×	○	○	○
INPUT SELECT * ²	VIDEO	○	×	×	×	×	×	×	×	×	×	×
	FORMAT	○	×	×	×	×	×	×	×	×	×	×
	NTSC SETUP	○	×	×	×	×	×	×	×	×	×	×
	SDI 1	×	○	○	×	×	×	×	×	×	×	×
	SDI 2	×	○	○	×	×	×	×	×	×	×	×
	YPbPr/RGB	×	×	×	×	×	○	○	○	×	×	×
	MODE	×	×	×	○	○	○	○	○	×	×	×
	COMPONENT LEVEL	×	×	×	×	×	○	×	×	×	×	×
	SELECT SYNC	×	×	×	○	○	○	○	×	×	×	×
	COMP.	×	×	×	×	×	×	×	○	×	×	×
	DVI-D	×	×	×	×	×	×	×	×	○	○	○
	MODE	×	×	×	×	×	×	×	×	○	○	○
AUDIO* ²	INPUT SELECT	○	○	○	○	○	○	○	○	○	○	○
	EMBEDED SELECT L	○	○	○	○	○	○	○	○	○	○	○
	EMBEDED SELECT R	○	○	○	○	○	○	○	○	○	○	○
	LEVEL METER	×	○	○	×	×	×	×	×	×	×	×
	CH SELECT	×	○	○	×	×	×	×	×	×	×	×
	0dB POINT	×	○	○	×	×	×	×	×	×	×	×
	CH INFO.	×	○	○	×	×	×	×	×	×	×	×

*1 This function is not available in the split-screen display of the “TWO WINDOW” function.

*2 This function can be set in the split-screen display of the “TWO WINDOW” function.

*3 Settings are reflected to the sub-window in the split-screen display of the “TWO WINDOW” function.

*4 Settings are reflected to the main window and the sub-window in the split-screen display of the “TWO WINDOW” function.

Main Menu (continued)

CH \ Input CH		VIDEO	SDI 1/2		YPbPr		RGB-VIDEO		RGB-COMP.	DVI-VIDEO		DVI-COMP.
			SD	HD	SD	HD	SD	HD		SD	HD	
DISPLAY SETUP ^{*2}	TWO WINDOW SIZE	○	○	○	○	○	○	○	×	○	○	×
	SUB INPUT SEL.	○	○	○	○	○	○	○	○	○	○	○
	WFM/VECTOR	○ ^{*5}	○	○	○ ^{*5}	○ ^{*5}	×	×	×	×	×	×
	POSITION	○	○	○	○	○	×	×	×	×	×	×
	VECTOR MODE	×	○	○	×	×	×	×	×	×	×	×
	VECTOR SCALE	×	○	○	×	×	×	×	×	×	×	×
	TIME CODE	×	×	○	×	×	×	×	×	×	×	×
	POSITION	×	×	○	×	×	×	×	×	×	×	×
	FONT SIZE	×	×	○	×	×	×	×	×	×	×	×
	MODE SELECT	×	×	○	×	×	×	×	×	×	×	×
	CLOSED CAPTION	○	×	×	×	×	×	×	×	×	×	×
	CAPTION SELECT	○	×	×	×	×	×	×	×	×	×	×
Picture adjustment ^{*2}	PHASE	○	○	○	○	○	○	○	×	○	○	×
	CHROMA	○	○	○	○	○	○	○	×	○	○	×
	BRIGHT	○	○	○	○	○	○	○	○	○	○	○
	CONTRAST	○	○	○	○	○	○	○	○	○	○	○
	BACKLIGHT	○	○	○	○	○	○	○	○	○	○	○

^{*2} This function can be set in the split-screen display of the "TWO WINDOW" function.

^{*5} The VECTOR display appears only during SDI input.